1.0 Introduction

This document provides guidance for the implementation of Facility Safety Plans (FSPs) that define the facility-level safety envelope (*The combined limits of parameters relating to the control of facility hazards, including engineering analyses of design features, engineered controls, and administrative controls, upon which DOE depends for its conclusion that activities at the facility can be conduced safely)* and the facility's processes to ensure safe facility operations, in accordance with LPR 240-01-00. As a tool for implementing integrated safety management, the FSP documents the links between activity, facility, and institutional expectations and how these expectations are communicated to and implemented at the facility.

2.0 Scope and Applicability

The safety plan set forth in this document is the suggested mechanism for meeting the safety requirements of LPR 240-01-00, Define Facility and Tenant Operations Limits and Configuration. The criteria specified in this document may be covered by each FMU in another format. As stated in the LPR, all Facility Managers shall have FSPs for their respective Facility Management Units (FMUs). The FMU may be addressed by a single FSP, or divided into segments each with its own FSP.

3.0 Guidance

As stated in the UC/DOE Contract No. :W07405-ENG-36
"The Contractor will complete Facility Safety Plans and submit Authorization Agreements as described in the approved ISMS Implementation Plan. Specifically, Facility Safety Plans will incorporate the philosophies and guidance of DOE O 5480.19 and will address, at a minimum:

- a description of the collective work of the Facility Management Unit and/or facility; analyses of facility hazards and facility hazard categorization as an operating limit;
- identification of facility-specific expectations and controls and authorization authority for facility;
- a definition of the safety envelope, if applicable;
- a description of mechanisms to implement the institutional work control process, including institutional requirements pertinent to the facility operations and safety surveillance requirements;
- how expectations are maintained (*e.g.,* FM / tenant, FM/support agreements, surveillance requirements, etc.);
- the means for identifying changes in activities and/or facility conditions, and associated hazards that could require modifications to the Facility Safety Plans and approval of any changes outside safety envelop by authorization authority
- identification of tenant responsibilities for conforming to the established standards for the conduct of operations in the facility; and
- requirements for training and/or qualifications of key positions in the facility to ensure facility personnel are knowledgeable of the work or operations in which they are involved;
- Start-up / restart requirements

The following table is a crosswalk of the DOE O 5480.19 and the performance criteria to be used as guidance in determining implementation of the conduct of operations philosophy.

LPR 240-01-00 Criteria Number	**DOE O 5480.19 Chapter**
ISM Plan, 5g	I. Operations, Organization and Administration
5a, 5b, 5c, 5f, 5g	II. Shift Routines and Operating Practices
5e, 5g	III. Control Area Activities
5g, 5h	IV. Communications
5h	V. Control of On-Shift Training
5g	VI. Investigation of Abnormal Events
5g, 5h	VII. Notifications
5d, 5e, 5f, 5g	VIII. Control of Equipment & System Status
5e, 5f, 5g, 5h	IX. Lockout and Tagouts
Institutional	X. Independent Verification
5e, 5f	XI. Logkeeping
5d, 5e, 5f	XII. Operations Turnover
5b, 5c, 5d, 5e, 5f, 5h	XIII. Operations Aspects of Facility Chemistry and Unique Processes
5c, 5e, 5g, 5h	XIV. Required Reading
5c, 5e, 5g	XV. Timely Orders to Operators
5a, 5b, 5e, 5f, 5g	XVI. Operations Procedures
5e, 5f, 5g	XVII. Operator Aid Postings
5d	XVIII. Equipment and Piping Labeling

At DOE's request the Contractor is to demonstrate to DOE that facilities are operated in accordance with their respective Facility Safety Plans.

The Facility Safety Plan Sample (Attachment 6.1) may follow the format of the guidance provided or be in another form that supplies the same information, to provide a safety reference for each facility at the Laboratory. The document should be prepared by the FM or staff to be used as a basis for such safety related interfaces as Facility Tenant Agreements, life safety, fire protection, hazardous materials handling, etc. The FSP may be a single document with appropriate references or a compilation of other applicable documents such as facility procedures and manuals, safety analysis reports, facility permits, emergency plans, quality management plans, and/or conduct of operations plans. The level of detail of the work description, the rigor of hazard analysis, and the nature of required facility processes and controls in an FSP should be commensurate with the magnitude of the hazards associated with the facility.

Changes: Except when covered by an agreement with a regulatory party (e.g., regulatory permits or authorization agreements), the FSP and referenced documents (but not institutional expectations) should be changed only at the discretion of the owning division director. When any member of the workforce proposes changes or interpretations, they should be submitted in writing to the facility owning division director. Disagreements regarding the safety expectations in the FSP should be resolved within the supervisory chains of the owning division director and the organization proposing the change.

Updates: In addition to ongoing changes, the FSP and referenced documents should be systematically reviewed and updated at least every three years by the owning division director or designee.

4.0 Documentation

A formal, approved Facility Safety Plan should be maintained in the Facility Manager's Office.

5.0 References

5.1 Document Ownership

The office of institutional coordination (OIC) for this document is the Facilities Management Program Office (IFMPO), 7-1262.

5.2 Documents

"Define Facility and Tenant Operations Limits and Configuration," Los Alamos National Laboratory LPR 240-01-00.

"Integrated Safety Management," LA-UR-98-2837, Rev. 2,Los Alamos National Laboratory, dated February 5, 1999.

UC/DOE Contract No. W-7405-ENG-36.

6.0 Attachments

6.1 Facility Safety Plan Sample FormatFACILITY SAFETY PLAN SAMPLE FORMAT

CONTENTS:

I. FACILITY DESCRIPTION/BOUNDARIES
II. DESCRIPTION OF COLLECTIVE WORK
III. ANALYSIS OF FACILITY HAZARDS/IMPACT
IV. IDENTIFICATION OF FACILITY-SPECIFIC EXPECTATIONS AND CONTROLS
V. DEFINITION OF THE SAFETY ENVELOPE (if required)
VI. DESCRIPTION OF MECHANISMS TO IMPLEMENT THE INSTITUTIONAL WORK CONTROL PROCESS (including institutional requirements pertinent to the facility operations)
VII. HOW EXPECTATIONS ARE MAINTAINED (e.g., FM/Tenant, FM/support agreements, surveillance requirements, etc.)
VIII. MEANS FOR IDENTIFYING CHANGES IN ACTIVITIES AND/OR FACILITY CONDITIONS, AND ASSOCIATED HAZARDS THAT COULD REQUIRE MODIFICATIONS TO THE FACILITY SAFETY PLAN
IX. TENANT ROLES AND RESPONSIBILITIES FOR CONFORMING TO THE ESTABLISHED STANDARDS FOR THE CONDUCT OF OPERATIONS IN THE FACILITY.

I. FACILITY DESCRIPTION/BOUNDARIES

This section should provide a physical description of buildings and boundaries covered by a specific FSP. Work areas and tenant occupancy are identified. Other pertinent information should be included that will enable a reader to understand the areas affected by the FSP.

This Facility Safety Plan is applicable to the following facility:

(Briefly describe the building number, TA, FMU and any other relevant information. Include a characterization of the types of work areas such as laboratories, office space, etc. Also, briefly note if the work areas are routinely occupied or are only used for occasional operations. If this facility is already described in another document, such as a safety assessment, reference that document for specific information.)

Note: If there is more than one FSP for the FMU, then include a reference to other FSPs.

II. DESCRIPTION OF COLLECTIVE WORK

This section should provide a description of various work activities and their respective interactions. All interactions associated with the FSP bounded areas, both inside the FMU and between FMUs, that impact one another should be described.
The following operations, performed by the following tenants, take place within this facility:

(The operations should be described in enough detail to guide the development of the remainder of the FSP. All tenant organizations should be identified and how they interact. If this information is already described in another document such as a FM/Tenant Agreement, that document should be referenced for specific information.)

The following facilities have hazards that could impact the facility described in this FSP:

(Identify any nearby hazardous operations or facilities that could adversely impact the facility being described in Section I.)

The following nearby facilities could be affected by hazardous operations performed at the facility described in this FSP:

(List each facility and briefly describe how it could be impacted.)

Hazardous operations are reviewed for their impact on nearby facilities as follows:

(Describe the mechanism in place to inform other facilities and/or FMUs of hazardous operations with a potential to impact their facilities.)

III. ANALYSIS OF FACILITY HAZARD IDENTIFICATION/IMPACT

This section should describe the interactions of each tenant's work related hazards, as they are assessed against the facilities engineering safety systems. Likewise, a

description of the interactions of various tenant's activity hazards, and their collective impact to the facility, should be examined, identified, assessed and the mitigation techniques and measures documented.

The hazards associated with this facility and its categorization are:

(The hazards associated with each operationdescribed in Section II should be described. If this information is described in another document, such as a hazard analysis or safety assessment, that document should be referenced here.)

The Tenant Operating Limits, as described in the FM/Tenant Agreement, are:

(The Tenant Operating Limits should be listed for each tenant.)

The operations of each tenant are reviewed for their impact on the operations of the other tenants as follows:

(The mechanism for assessing the impact of, and cumulative effect of, tenant operational hazards on facility operations should be described.)

The Facility Operating Limits, as described in the FM/Tenant Agreement, are:

(The inventory limits for hazardous materials and hazardous equipment e.g. lasers should be listed.)

The following controls are in place to mitigate hazards associated with facility or tenant operations:

(The appropriate document should be listed or referenced.)

IV. IDENTIFICATION OF FACILITY-SPECIFIC EXPECTATIONS AND CONTROLS

This section should provide identification of, or crosswalk to, current documents and their use. Facility specific documents such as: FM/Tenant Agreements, Site Specific Training requirements, surveillance requirements, or any other requirements beyond line provisions. This section should also identify the Facility specific work control process and your integration to the Institutional Work Control process.

The following programs are utilized to ensure that the facility's safety envelope is maintained:

(The programs utilized should be listed).

V. DEFINITION OF THE SAFETY ENVELOPE (if required)

This section should identify or discuss the appropriate 'chain-of-command', such as the Division Org Chart–that delineates line management/FMU functionality– the Facility Org Chart, any Quality Management plans, the required FM/Tenant Agreements, the authorization authority, and the applicability to the FMU/Zone description and function.

The line management chain responsible for safety in this facility is:

(How the FM and tenant organizations interact for safety responsibilities should be described. Text or charts should be used as necessary.)

VI. DESCRIPTION OF MECHANISMS TO IMPLEMENT THE INSTITUTIONAL WORK CONTROL PROCESS

This section should describe the mechanisms used to implement the institutional work control process.

VII. HOW EXPECTIONS ARE MAINTAINED

This section should identify FM/Tenant agreements. FM/support agreements, surveillance requirements, etc., that are in place, and a brief description or how they are maintained.

VIII. IDENTIFYING CHANGES IN ACTIVITIES AND/OR FACILITY CONDITIONS, AND ASSOCIATED HAZARDS THAT COULD REQUIRE MODIFICATIONS TO THE FACILITY SAFETY PLAN

This section should identify the means utilized for identifying changes in activities and/or facility conditions, and associated hazards that could require modifications to the facility safety plan.

IX. TENANT ROLES AND RESPONSIBILITIES

This section should refer to the tenant roles and responsibilities for conforming to the established standards for the conduct of operations in the facility. (Usually found in the FM/tenant agreement.)

X. TRAINING/QUALIFICATION REQUIREMENTS

This section should identify the required training and/or qualification required of key positions in the facility to ensure facility personnel are knowledgeable of the work or operations in which they are involved.

XI. START UP AND RESTART

REQUIREMENTS:

Facility Managers should:

- Ensure that prior to authorizing facility related work to be performed an effective level of readiness assessment commensurate with the level of risk is conducted and documented as part of work control,
- Ensure that prior to startup or restart of a new or modified facility an effective level of readiness assessment, commensurate with the level of risk, is conducted and documented. (Note: This may require DOE involvement and should be determined prior to startup or restart.)

Tenants should:

- Ensure that prior to authorizing new or modified programmatic work an effective level of readiness assessment, commensurate with the level of risk, has been conducted and documented.
- Ensure that programmatic work requiring DOE approval for initial startup or restart has received the appropriate level of readiness assessment including any DOE reviews.
- Ensure that facility management is cognizant of startups and restarts and have confirmed that this is within the facility envelope.

XII REFERENCES

This section should reference any written documents/materials that will enable the reader to easily follow the 'roadmap' from support information to the FSP as presented. Most of the FMUs have information available that does NOT need to be repeated, but merely listed by referencing them by title, date, and location.

(List.)